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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,019	09/08/2004	Tsunchisa Sanagi	DK-US020672	7705
22919 7590 06/15/2007 GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER NALVEN, EMILY IRIS	
			ART UNIT 3744	PAPER NUMBER
			MAIL DATE 06/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,019	Applicant(s) SANAGI, TSUNEHISA	
	Examiner Emily I. Nalven	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-10 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on Sept. 8, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>Sept 8, 2004, Oct 19, 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. It is noted that this application appears to claim subject matter disclosed in prior JP Patent Application No. 2002-363488, filed Dec. 16, 2002. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e),

Art Unit: 3744

120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Centrifugal Blower and Air Conditioner with Air Flow Guide.

Claim Objections

3. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n). Claims 3 and 8 are dependent on claim 1 but come after claim 2 and 7 respectively. Claim 2 is an independent claim and claim 7 is dependent on claim 2. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Bostwick (US Patent Pub No (2002/0141888 A1).

In regard to claim 1, Bostwick teaches a centrifugal fan (10) (see Fig. 1 and para 24 lines 1-3) that sucks air from a rotary shaft direction (14) (para 24 lines 1-3) and blows air out in a direction that intersects a rotary shaft (62) (para 9 lines

4-9 and para 10 lines 1-7) comprising an electric motor (64) having said rotary shaft (62) (see Fig. 6 and para 33 lines 1-2), a main plate (20) (para 24 lines 6-7) having a cooling air hole (48) (para 29 lines 26-29) and being coupled to and rotationally driven by said rotary shaft (62) (see Fig. 6 and para 32 lines 4-13), a plurality of blades (16) provided on the surface of said main plate (20) on the side opposite an electric motor (64) and at a position on the outer peripheral side of the radial position of said cooling air hole (48) (Fig. 6 and para 24 lines 7-8 and para 32 lines 4-9).

Bostwick also teaches an air guide (70) that after a portion of the blown out air has been guided to the vicinity of said electric motor (64) and has cooled said electric motor (64), guides the air flow so that the revolving direction (para 32 lines 1-2) velocity decreases when blown out from said cooling air hole (48) to the side of said main plate (20) opposite said electric motor (64) (para 35 lines 9-15 and para 37 lines 7-10). The term "vicinity" is interpreted to mean that the air blown off of fan (10) is within the same system as the electric motor (64).

In regard to claim 2, Bostwick teaches a centrifugal fan (10) (see Fig. 1 and para 24 lines 1-3) that sucks air from a rotary shaft direction (14) (para 24 lines 1-3) and blows air out in a direction that intersects a rotary shaft (62) (para 9 lines 4-9 and para 10 lines 1-7) comprising an electric motor (64) having said rotary shaft (62) (see Fig. 6 and para 33 lines 1-2), a main plate (20) (para 24 lines 6-7) having a cooling air hole (48) (para 29 lines 26-29) and being coupled to and

rotationally driven by said rotary shaft (62) (see Fig. 6 and para 32 lines 4-13), a plurality of blades (16) provided on the surface of said main plate (20) on the side opposite an electric motor (64) and at a position on the outer peripheral side of the radial position of said cooling air hole (48) (Fig. 6 and para 24 lines 7-8 and para 32 lines 4-9).

Bostwick also teaches an air guide (70) that after a portion of the blown out air has been guided to the vicinity of said electric motor (64) and has cooled said electric motor (64), guides the air flow so that it is blown out toward the side of the main plate (20) in the counter rotational direction (para 32 lines 1-2) when blown out from said cooling air hole (48) to the side of said main plate opposite said electric motor (64) (para 35 lines 9-15 and para 37 lines 7-10 and lines 28-34). The term "vicinity" is interpreted to mean that the air blown off of fan (10) is within the same system as the electric motor (64).

In regard to claim 3, Bostwick teaches a centrifugal fan (10) wherein said air guide (70, 72) is formed with said main plate (20) (see Fig. 6). It is presumed that the recitation "formed with" means that the main plate (20) and the air guide (70) are all part of the same air blowing system.

In regard to claim 4, Bostwick teaches a centrifugal fan (10) comprising a cover (72) that covers said cooling air hole (48) (see Fig 6) from the side opposite the electric motor (64) and that is provided so that it rotates integrally with said main

plate (20) wherein said air guide (70) is formed between said cover (72) and said main plate (20) (see Fig. 6 and para 37 lines 7-10).

In regard to claim 5, Bostwick teaches a centrifugal fan (10) wherein said air guide (70) has a blade shape inclined rearwards in the rotational direction of said cover (72) (see Fig. 6). The term “inclined rearwards in the rotational direction of said cover” is interpreted to mean that the air guide is located in between the fan (10) and the cover (72), which rotates with the fan (10).

In regard to claim 6, Bostwick teaches a centrifugal fan (10) wherein said air guide (70) has a volute blade shape (para 33 lines 1-4). The air guide (70) surround the rotor in a spiral manner.

In regard to claim 7, Bostwick teaches a centrifugal fan (10) wherein said air guide (70) is formed in said cover (72) (see Fig. 4 and see Fig. 6). The term “formed in said cover” is interpreted to mean that the air guide (70) and cover (72) are both elements of the same air blowing system.

In regard to claim 8, Bostwick teaches an air conditioner comprising a centrifugal fan (10), a heat exchanger (68) (para 36 lines 11-19) arranged on the outer peripheral side of said centrifugal fan (10) and a casing that houses said centrifugal fan (10) and said heat exchanger (68) (para 5 lines 1-9).

In regard to claim 9, see rejection for claim 3 above.

In regard to claim 10, see rejection for claim 8 above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

Nishiyama et. al. (US Patent No. 6,454,527 B2) teaches a fan with a cap.

Ramos et. al. (US Patent No. 6,298,682 B1) teaches a centrifugal fan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily I. Nalven whose telephone number is 571-272-3045. The examiner can normally be reached on Monday - Thursday 8 AM - 5:30 PM and on alternate Fridays 8 AM – 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisors, Cheryl J. Tyler can be reached on 571-272-4834 and Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emily Iris Nalven
Art Unit 3744
June 4, 2007

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over a horizontal line.